



The Evening World's TRICKS AND PUZZLES

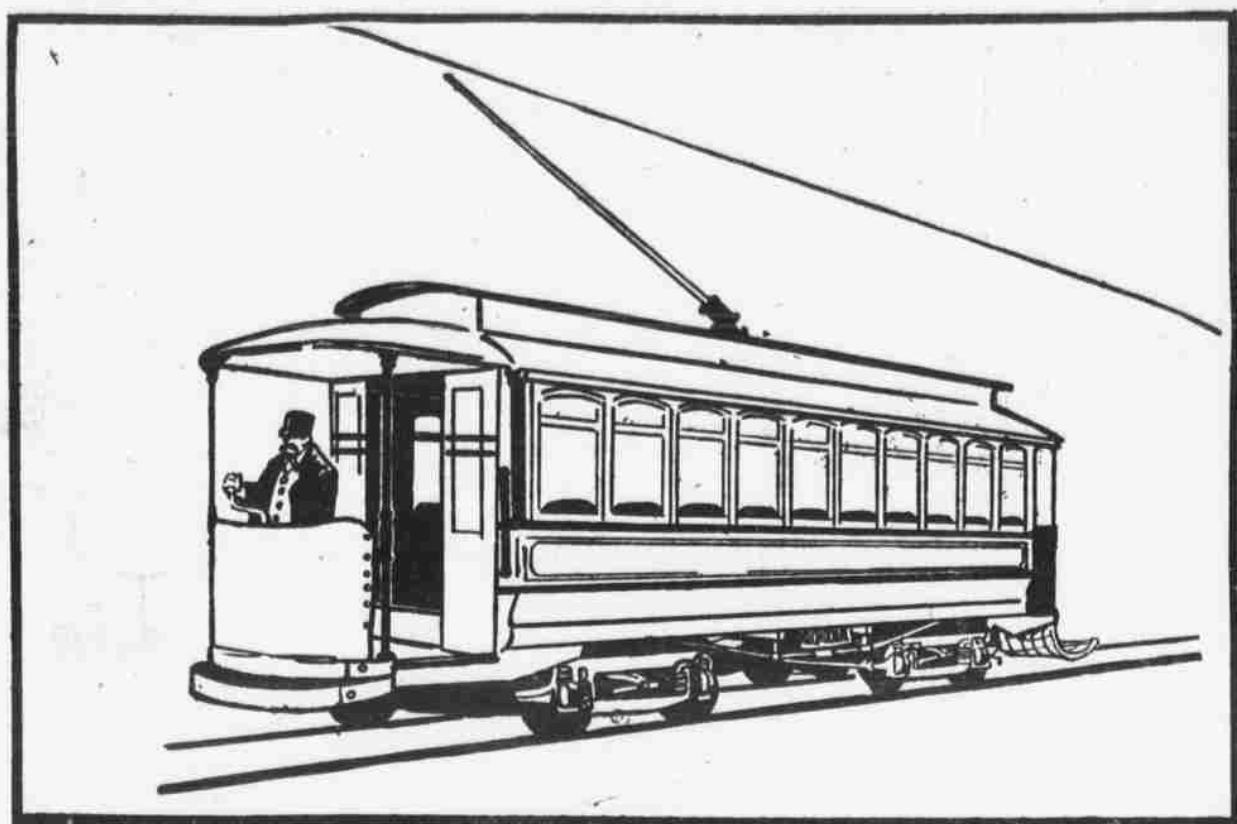


WHAT'S THE MATTER WITH THIS TROLLEY CAR?

THE Mudville and Podunk Traction Company has received a complaint from the Public Service Commission that the line is not living up to its schedule, is neglecting to keep its equipment in proper repair and has not provided adequate facilities for its passengers.

By carefully studying the picture can you find eight reasons for the commission's complaint?

You'll find them listed at the bottom of this page.



The Mystic Number.

IN this trick you will write on a slip of paper a number. Then, without showing any one what you have written, you will fold the paper and ask some one to hold it until the conclusion of the trick.

A spectator will next be requested to think of a number, preferably a number not larger than ten. He is to multiply the number by two. Then he is to add four, multiply by three and divide by six. He is then to subtract the number of which he thought and to add five to the remainder.

All of this mathematics he is to do of course, mentally. At the conclusion, ask him to tell the result. It will be seven.

Ask him to unfold the paper on which you wrote before beginning the trick. On it will be written the figure 7.

There isn't any trick about it. If you write "7" on the paper and ask the spectator to do the calculations here suggested, you'll never fail!

The Ravelling.

THIS is an excellent and harmless practical joke.

Among your friends there is surely one of those well-meaning persons who picks bits of lint from your coat. Prepare for him.

Get a spool of white cotton thread. Run the end of the thread through the eye of a needle and drop the spool into your inside coat pocket. By means of the needle, run the thread through your coat (from the inside) so that it comes out well up on the shoulder. Let two or three inches of the thread hang and remove the needle.

That bit of white thread on your shoulder will be too much of a temptation for the friend who tries to keep you neat and tidy. He will try to remove it and will find that you "have him on a string."

Willie's Problem.

WILLIE'S teacher gave him this problem:

"A farmer has a field, triangular in shape. One side is 50 feet long, one side is 48 feet long and one side is 99 feet long. How many square feet does the field contain?"

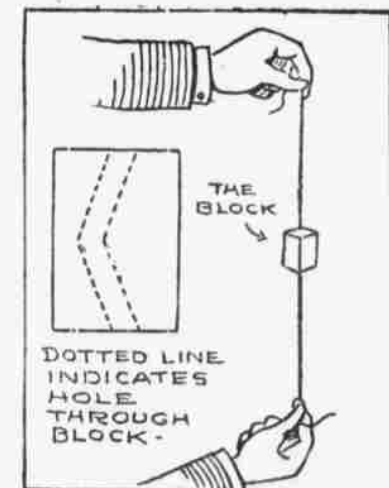
Willie thought that his answer was correct, but the teacher told him that it wasn't. What was Willie's answer and why was it incorrect?

You may work out Willie's answer if you like, but a better thing to do is to put the problem to some friend. Let him do the calculating. Then break this sad news to him:

"A triangle with the dimensions given is impossible."

THIS trick may be familiar to some readers as the obedient ball. As it is not necessary that the trick be done with a ball, it may easily be made at home. With any block of wood and a brace and bit, the trick may be prepared for demonstration in a few minutes.

The block of wood, two inches each way, is threaded on a string. The



HERE are two wheels, both the same size. The wheel A is fixed and moves only on its own axis. The wheel B makes a complete revolution of wheel A, touching it at all times.

The question is, how many times will wheel B revolve on its own axis in making one trip around wheel A. Try it out with two half dollars and you will have a puzzle that you

can show to your friends. Always point out that the circumference of one half dollar is exactly the same as that of the other half dollar.

magician holds the string, one end in each hand. Raising it to a vertical position, with the block at the upper end, he is ready to begin. He drops the block; it, of course, falls to the lower end of the string. (Figure 1.)

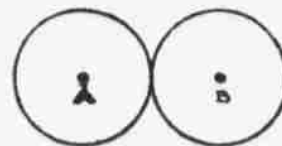
He raises the block to the upper end again and lets it drop. It stops half way. Not until the magician says "Go!" does it resume its journey to the lower end. The trick is repeated. This time any spectator may say "Stop!" and "Go!" and the block obeys.

Seemingly the hole goes right through the block. Actually there is a bend in it—that is, you must bore half way through from one side and then half way through at the other. The holes must meet at an angle. The illustration shows how the two holes meet. Paint the whole thing black, taking care to get plenty of paint in the holes. After you have threaded the block on a string, fasten big buttons to the ends of the string. That will keep you from pulling the block off the cord.

If you want the block to fall freely, hold the string loosely. If you want it to stop, pull the cord taut. The block will immediately stop. With a little practice you can hold the string so that the block will fall loosely, but so that only a slight movement is needed to make it halt.

Do You Know?

The answer ought to be obvious but—can you answer it without trying? You'll find that your friends will experience as much difficulty figuring it out.



The answer ought to be obvious but—can you answer it without trying? You'll find that your friends will experience as much difficulty figuring it out.

The Mudville Trolley.

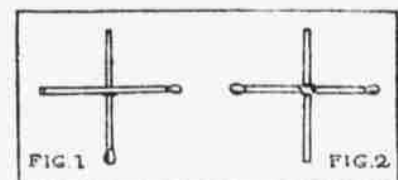
Here are eight things wrong with the trolley car drawn at the top of this page.

1. The car has one flat wheel.
2. The trolley pole has no wheel and does not touch the overhead wire.
3. The trolley pole inclines the wrong way.
4. There is no rope attached to the trolley pole to guide it when it slips from the wire.
5. There are no steps by which passengers can enter or leave the car.
6. The fender is on the wrong end of the car.
7. The car has no ventilating transoms in the roof.
8. The car has no headlight.

The Cross With Matches.

PUT two matches on the table as in Figure 1.

"There is a cross made with two matches," you will say. "But that is the easiest way to do it. It would be quite a puzzle if you could make a cross without placing one match on the other."



Your friends will say that it is impossible, but you know better. Bend the matches so that they almost break at the centre and—there you are. (Figure 2.)

The Vanishing Glass.

MAGICIANS know that it is rarely wise to tell an audience what is to happen. The climax of a trick should come as a surprise. Moreover, if the audience is told what is to come next, they will be on the lookout for trickery in quarters where it might not be suspected. This is a case in point. It pretends to be a coin trick, but winds up as something else.

Twist a piece of stiff paper around a glass and invert the covered glass on the table at which you sit. Borrow a coin and put it on the table. Cover it with the glass. Say:

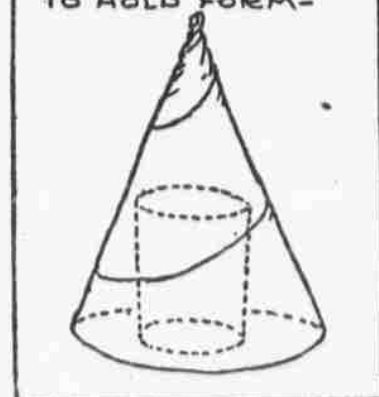
"Presto! Go!"

Lift the glass and discover to your chagrin that the coin is still there. Cover it again. Once more:

"Presto! Go!"

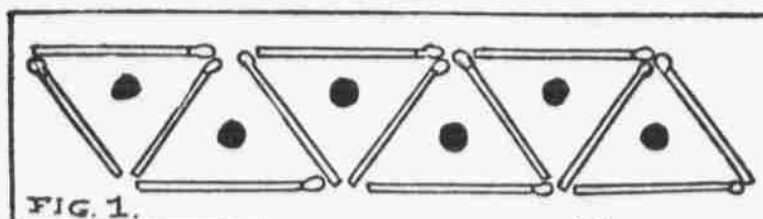
Bring your right palm down on the glass. The paper cover collapses. The coin is still there, but the glass has vanished.

ROLL PAPER INTO CONE TO COVER GLASS - TWIST TOP TO HOLD FORM -



When you lift the glass, disclosing the coin, all eyes are on the coin. That gives you an opportunity to lower the glass just a trifle behind the table and permit it to drop out of the paper cover into your lap. The paper being stiff, will hold the form of the glass. It is only this cover that you place over the coin.

The Jail.



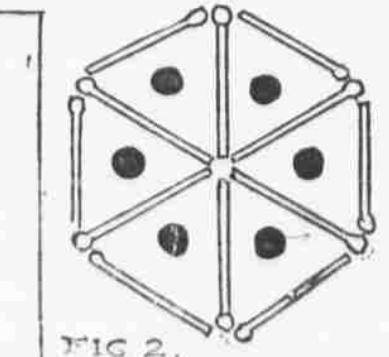
FOR this puzzle you will need thirteen matches and six beads or buttons.

Arrange the matches as in Figure 1, explaining that they represent a jail in which there are six cells. Put one button in each cell to represent the six prisoners who are confined in the jail.

Take away one of the matches.

"The problem is to make a jail, with six cells, each big enough to hold these six prisoners, one in a cell, with the twelve matches. The cells must be the same size and shape."

Your friends will labor long before they discover the solution. It is easy



when you know how, as Figure 2 indicates.